

In the Claims:

Claims 1 to 16 and 19 to 26 are of record.

Claims 1 to 7 and 10 to 16 stand rejected.

Claims 8 and 19 to 26 are allowed.

Explanation of Amendments in the Claims:

1.(cancelled without prejudice)

2.(currently amended) The greenhouse according to Claim 4 9 wherein the width of each bench of the plurality of benches is substantially equal to the width of the spans.

3.(Canceled without prejudice)

4.(currently amended) The greenhouse according to Claim 4 9 wherein the exterior wall structure includes third and fourth side walls at right angles to said first and second side walls each of the first, second, third and fourth side walls have the same spans between the plurality of vertical posts thereof and the length of each bench from said first side wall is equal to a multiple of the spans.

5.(currently amended) The greenhouse according to Claim 4 9 wherein each of the benches of the plurality of benches is located such that it has one end at said first side wall and has an opposed end spaced from said second side wall.

6.(currently amended) The greenhouse according to Claim 4 9 wherein each of the spans equals six feet.

7.(currently amended) The greenhouse according to Claim 4 9 wherein the plurality of vertical posts and the transparent panels therebetween form a curtain wall construction in which the transparent panels are attached at their edges to the vertical posts and fully extend across the span therebetween without intermediate support elements.

8.(previously amended) A greenhouse comprising:

an exterior wall structure which includes primarily transparent panels allowing entry to an interior of natural light;

a plurality of elongate benches located within the interior and arranged to provide support surfaces for supporting crop materials thereon for receiving the natural light and growing within the interior;

an air handling system for conditioning the air within the interior including at least one air moving fan, at least one interior air intake, at least one interior air outlet, at least one exterior vent and at least one component for changing air temperature;

the exterior wall structure including a first side and a second side wall opposite to the first side wall with each of the first and second side walls defined by a plurality of vertical posts at spaced positions along the length of the side wall defining equal spans between each of the plurality of vertical posts and the next with transparent panels arranged to substantially fill the span between the posts;

the benches being arranged at spaced positions along the first side wall such that each bench has one end adjacent said first side wall and extends therefrom at right angles thereto toward the second side wall;

each bench of the plurality of benches being associated with a respective one of the spans between the plurality of vertical posts of said first side wall and arranged such that the number of spans is equal to the number of benches of the plurality of benches;

wherein each bench of the plurality of benches has associated therewith a respective one of a plurality of air handling systems, each air handling system including a fan, at least one air intake below the respective bench of the plurality of benches and at least one air outlet above the respective bench of the plurality of benches.

9 (currently amended) ~~The greenhouse according to Claim 4~~ A greenhouse comprising:
an exterior wall structure which includes primarily transparent panels allowing entry to an interior of natural light;

a plurality of elongate benches located within the interior and arranged to provide support surfaces for supporting crop materials thereon for receiving the natural light and growing within the interior;

an air handling system for conditioning the air within the interior including at least one air moving fan, at least one interior air intake, at least one interior air outlet, at least one exterior vent and at least one component for changing air temperature;

the exterior wall structure including a first side wall and a second side wall opposite to the first side wall with each of the first and second side walls defined by a plurality of vertical posts at spaced positions along the length of the side wall defining equal spans between each of the plurality of vertical posts and the next with transparent panels arranged to substantially fill the span between the plurality of vertical posts;

each bench having a bench support for the bench located underneath the bench;

the benches being arranged at spaced positions along the first side wall such that each bench has one end adjacent said first side wall such that the bench and the bench support therefor each extend from the first side wall at right angles thereto toward the second side wall;

each bench being associated with a respective one of the spans such that the number of spans is equal to the number of the plurality of benches and such that the bench support of each bench is located between the plurality of vertical posts of the associated respective one of the spans;

wherein the air handling system consists of a plurality of separate air handling systems each air handling system of the plurality of air handling systems being associated with a respective one of the benches of the plurality of benches and each air handling system of the plurality of air handling systems including a fan, at least one air intake below the respective bench of the plurality of benches and at least one air outlet above the respective bench of the plurality of benches.

10.(currently amended) The greenhouse according to Claim 4 9 wherein the exterior wall structure includes third and fourth side walls at right angles to said first and second side walls each of the first, second, third and fourth side walls have the same spans between the plurality of vertical posts thereof and wherein there is provided an alley way formed outside the second wall by an alley wall parallel to the second wall, the alley way having a width equal to the width of one span.

11.(currently amended) The greenhouse according to Claim 4 9 wherein the exterior wall structure includes third and fourth side walls at right angles to said first and second side walls each of the

first, second, third and fourth side walls have the same spans between the plurality of vertical posts thereof and wherein there is provided a doorway into the interior, the doorway being formed in a door panel having a width equal to the width of one span and arranged to be mounted between two of the plurality of vertical posts.

12.(currently amended) The greenhouse according to Claim 4 9 wherein the exterior wall structure includes third and fourth side walls at right angles to said first and second side walls each of the first, second, third and fourth side walls have the same spans between the plurality of vertical posts thereof and wherein there is provided an electrical system for controlling the air handling system including at least one electrical cabinet containing electrical components; the at least one electrical cabinet being formed as at least part of an integral panel having a width equal to the width of one span and arranged for location between two of the plurality of vertical posts.

13.(currently amended) The greenhouse according to Claim 12 wherein there are provided a plurality of electrical cabinets each formed as at least part of an integral panel having a width equal to the width of one span and arranged for location between two of the plurality of vertical posts.

14.(currently amended) The greenhouse according to Claim 12 wherein there is provided an alley way formed outside said second wall by an alley wall parallel to the second side wall, the alley way having a width equal to the width of one span and wherein the integral panel forms one panel spanning two posts of the plurality of vertical posts of the alley wall.

15.(original) The greenhouse according to Claim 12 wherein the integral panel is defined by the cabinet and wall panel portions along at least one side of the cabinet.

16.(currently amended) The greenhouse according to Claim 12 wherein the integral panel is fastened to the two posts of the plurality of vertical posts.

17.(Cancelled)

18.(Cancelled)

19.(currently amended) A greenhouse comprising:

an exterior wall structure which includes primarily transparent panels allowing entry to an interior of natural light;

a plurality of elongate benches located within the interior and arranged to provide support surfaces for supporting crop materials thereon for receiving the natural light and growing within the interior;

an air handling system for conditioning the air within the interior including at least one air moving fan, at least one interior air intake, at least one interior air outlet, at least one exterior vent and at least one component for changing air temperature;

the exterior wall structure including a first side and a second side wall opposite to the first side wall with each of the first and second side walls defined by a plurality of vertical posts at spaced positions along the length of the side wall defining equal spans between each of the plurality of vertical

posts and the next with transparent panels arranged to substantially fill the span between the plurality of vertical posts;

the plurality of benches being arranged at spaced positions along the first side wall such that each bench has one end adjacent said first side wall and extends therefrom at right angles thereto toward the second side wall;

each bench being associated with a respective one of the spans between the plurality of vertical posts of said first side wall and arranged such that the number of spans is equal to the number of the plurality of benches;

wherein the air handling system for conditioning the air within the interior includes a plurality of air moving fans each mounted in a respective one of a plurality of fan housing having at least one interior air intake and at least one interior air outlet; the plurality of fan housings being arranged in a row along said first side wall of the exterior wall structure; the number of the plurality of fan housings being equal to the number of spans between the plurality of posts along said one side wall;

each fan housing being mounted in the span between a respective pair of the plurality of vertical posts.

20.(currently amended) The greenhouse according to Claim 19 wherein each of the plurality of fan housing projects between the plurality of vertical posts such that each side thereof lies inside a side surface of the respective post of the plurality of vertical posts.

21.(currently amended) The greenhouse according to Claim 19 wherein said first side wall includes a plurality of non-transparent wall panels with each non-transparent wall panel being arranged in the span between a respective pair of posts of the plurality of vertical posts, each non-transparent wall panel having a height substantially equal to the top of the respective fan housing of the plurality of fan housings.

22.(currently amended) The greenhouse according to Claim 21 wherein each non-transparent wall panel is located at a position spaced outwardly of the outside surfaces of the plurality of vertical posts to define a channel inside the non-transparent wall panels and outside the plurality of vertical posts and wherein there is provided a sill covering the channel and located at a bottom of the transparent panels.

23.(currently amended) The greenhouse according to Claim 19 wherein there is provided an air outlet through the first side wall at the respective fan housing of the plurality of fan housings connected ~~thereto to the fan housing~~ on a pressure side thereof.

24.(currently amended) The greenhouse according to Claim 19 wherein there is provided an air inlet through the first side wall at the respective fan housing of the plurality of fan housings connected ~~thereto to the fan housing~~ on a suction side thereof.

25.(currently amended) A greenhouse comprising:

an exterior wall structure which includes primarily transparent panels allowing entry to an interior of natural light;

a plurality of elongate benches located within the interior and arranged to provide support surfaces for supporting crop materials thereon for receiving the natural light and growing within the interior;

an air handling system for conditioning the air within the interior including at least one air moving fan, at least one interior air intake, at least one interior air outlet, at least one exterior vent and at least one component for changing air temperature;

the exterior wall structure including a first side, a second side wall opposite to the first side wall a third side wall and a fourth side wall at right angles to the first and second side walls, with each of the side walls defined by a plurality of vertical posts at spaced positions along the length of the side wall defining equal spans between each of the plurality of vertical posts and the next with transparent panels arranged to substantially fill the span between the plurality of vertical posts;

the benches being arranged at spaced positions along the first side wall such that each bench has one end adjacent said first side wall and extends therefrom at right angles thereto toward the second side wall;

each bench being associated with a respective one of the spans between the plurality of vertical posts of said first side wall and arranged such that the number of spans is equal to the number of the plurality of benches;

wherein the air handling system for conditioning the air within the interior includes wiring and piping for supplying electrical power and air conditioning fluid for changing the air temperature;

wherein each of the side walls includes a plurality of bottom non-transparent wall panels arranged in the span between each pair of the plurality of vertical posts, each non-transparent wall panel extending to the bottom of the transparent panels; and a sill at the bottom of the transparent panels extending outwardly of the plurality of vertical posts;

and wherein each non-transparent wall panel is located at a position spaced outwardly of outside surfaces of the plurality of vertical posts to define a channel inside the non-transparent wall panels and outside the plurality of vertical posts and below the sill for receiving said wiring and piping.

26.(currently amended) The greenhouse according to Claim 25 wherein the transparent panels are connected to the outside surfaces of the plurality of vertical posts.